REMARKS

The Title has been changed such that it is more descriptive of the claimed invention.

The claims have been amended to more clearly define the invention as disclosed in the written description. In particular, the claims have been amended for clarity.

Applicants would like to note that claim 8 includes the limitation "the encoding assistance data comprises encoding scale factor data" while claim 11 includes the limitation "the encoding assistance data does not comprise scale factor values". Applicants submit that these limitations are not contradictory in that while the encoding assistance data may comprises encoding scale factor data, it may not comprise scale factor values.

Applicants believe that the above changes answer the Examiner's 35 U.S.C. 112, paragraph 2, rejection of the claims, and respectfully request withdrawal thereof.

The Examiner has rejected claims 1-3, 6-20, 23-25, 27 and 28 under 35 U.S.C. 101 in that the claimed invention is directed to non-statutory subject matter.

Applicants submit that the Examiner is in error. While the subject **invention** "can be implemented in any suitable form including hardware, software, firmware or any combination of these", it is a well-established practice in preparing a patent specification to include several embodiments in the specification. To this extent, the specification covers the invention embodied in software. Applicants submit that this is statutorily claimed in,

for example, claim 27 which claims a computer-readable medium containing the "software program". However, the noted claims relate to the hardware implementation. As such, Applicants submit that claims 1-3, 6-20 and 23-25 are indeed statutory.

The Examiner has rejected claims 1-9, 11, 16-22, 27 and 28 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Application Publication No. 2002/0002412A1 to Gunji et al. (reported by the Examiner as Hiroshi et al.). The Examiner has further rejected claims 6, 10, 12-15 and 23-26 under 35 U.S.C. 103(a) as being unpatentable over Gunji et al. in view of U.S. Patent Application Publication No. 2002/0034376 to Katayama et al.

The Gunji et al. patent discloses a digital audio system.

As noted in MPEP §2131, it is well-founded that "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California,* 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Further, "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.,* 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond,* 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Examiner has indicated that Gunji et al. discloses the claim limitation "a pre-encoder for pre-encoding the signal to

generate a pre-encoded signal" and points to "fig.9:10; fig. 4:22; fig. 13:22; par. 45; 46".

Applicants would like to note that item 10 in Fig. 9 is a memory which stores MPEG audio data (page 5, paragraph [0072]) and as such cannot be considered a pre-encoder. Item 22 in Figs. 4 and 13 is an MPEG encoder.

The Examiner then notes that "watermark processing means comprising" is shown in Fig. 9, and includes the claim limitations "a decoder for decoding the pre-encoded signal to generate a decoded signal" (Fig. 9, item 11), "a watermark embedder for inserting a watermark in the decoded signal to generate a watermarked signal" (Fig. 9, item 18), and "a re-encoder for re-encoding the watermarked signal to generate a watermarked encoded signal" (Fig. 9, item 22).

First, Applicants would like to point out that the Examiner has identified the pre-encoder and the re-encoder of the claimed invention as the same structure, i.e., the MPEG audio encoder 22. Hence, it is quite clear that elements being disclosed by Gunji et al. are not arranged as required by the claim.

Further, with regard to the limitation "wherein the pre-encoder generates encoding assistance data, and the re-encoder re-encodes the watermarked signal in response to the encoding assistance data", the Examiner indicates paragraphs 45, 46, 74 and 75.

Applicants submit that the Examiner is mistaken. In particular, paragraphs 45 and 46 of Gunji et al. state:

"[0045] Accordingly, the digital audio units 1 and 2 have their MPEG audio data in their memories 10 and 20 coded by the same coding parameters, and consequently, the decay of sound quality at re-encoding by the MPEG audio encoder 22 can be alleviated.

"[0046] Particularly, in case the MPEG audio data in the memory 10 of the digital audio unit 1 has been down-loaded from a down-loading terminal unit by being coded with the rendition of high-grade optimization and the digital audio unit 2 re-encodes the received audio data by using coding parameters different from those for coding, the decay of sound quality is inevitable, whereas by transferring the coding parameters from the encoding unit 1 to the decoding unit 2 as shown in FIG. 1, it becomes possible for the MPEG audio encoder 22 of the digital audio unit 2 to use the same coding parameters as those used for coding by the down-loading terminal unit. In consequence, it becomes possible to prevent or alleviate the decay of sound quality particularly at re-encoding. Moreover, the MPEG audio encoder 22 of the digital audio unit 2 does not need to compute coding parameters, and the reduction of power consumption of the unit 2 can be expected."

Applicants submit that careful reading of the above paragraphs will reveal that Gunji et al. contemplates the generation of coding parameters in the decoder 11 of audio unit 1 and transferring these coding parameters to the encoder 22 of audio unit 2. However, as indicated in claim 1, the encoding assistance data is generated by the pre-encoder, while the re-encoder uses this encoding assistance data in re-encoding the watermarked signal.

With regard to paragraphs [0074] and [0075], Gunji et al. states:

"[0074] The signature encoder 18 embeds the electronic signature information 51 in the source information which is the multiplexed audio data 16 provided by the multiplexing circuit 12, and releases the resulting multiplexed audio data 16A. The signature decoder 23 separates the multiplexed audio data 16A into the

> electronic signature information 51 and multiplexed audio data 16. The controller (not shown) analyzes the electronic signature information 51 to check the permission of re-encoding, and the parameter detecting circuit 21 separates the multiplexed audio data 16 into the PCM audio data 15 and coding parameters 14 if re-encoding is granted. The MPEG audio encoder 22 encodes the PCM audio data 15 and stores the resulting MPEG audio data in the memory 20. The encoding process uses the coding parameters 14 which are released by the parameter detecting circuit 21.
>
> "[0075] FIG. 11 shows the fifth example of the inventive digital audio system which is adapted to alter the electronic signature information within the system. The memory 10 stores coded MPEG audio data, with electronic signature information being embedded therein. The digital audio unit 3, which is adapted to alter the electronic signature information internally, includes a memory 10, an MPEG audio decoder 11, a signature decoder 23, a signature encoder 18, an MPEG audio encoder 22, a memory 20, and a signature altering circuit 52. The coding parameters 14 are fed from the MPEG audio decoder 11 to the MPEG audio encoder 22."

Applicants submit that a careful reading of these paragraphs indicates that Gunji et al. is primarily concerned with the downstream checking of the inserted electronic signature to determine if subsequent encoding is permitted. Further, as noted by Gunji et al., the encoding process uses coding parameters 14 released by the parameter detecting circuit 21. However, as clearly shown in Fig. 10, these coding parameters 14 are generated by the decoder 11 and multiplexed with the encoded audio signal by multiplexing circuit 12. this is clearly stated by Gunji et al. in paragraph [0075], i.e., "The coding parameters 14 are fed from the MPEG audio decoder 11 to the MPEG audio encoder 22".

With regard to claims 23 and 26, the Examiner states that Gunji et al. discloses "a means to encode a signal at a first

encoding rate, means for generating encoding assistance data, and means for utilizing the encoding assistance data to re-encode the signal". However, Applicants submit that the means for encoding and the means for utilizing the encoding assistance data to re-encode are indicated by the Examiner as being the same means (item 22). Hence, either there is no initial pre-encoding as in the claims or there is no re-encoding, again as in the claims. Further, the means for generating encoding assistance data is the decoder 11 in Gunji et al., while in the subject claimed invention, the means for generating encoding assistance data is the pre-encoder.

The Katayama et al. publication discloses a coding device, coding method, program and recording medium. While Katayama et al. arguably discloses "that an encoder may include encoding assistance data comprising "scale factor offset data" for enabling a re-encoder to encode the signal at a second encoding rate" as noted by the Examiner, Applicants submit that Katayama et al. does not supply that which is missing from Gunji et al.

In view of the above, Applicants believe that the subject invention, as claimed, is neither anticipated nor rendered obvious by the prior art, either individually or collectively, and as such, is patentable thereover.

Applicants believe that this application, containing claims 1-27, is now in condition for allowance and such action is respectfully requested.

Respectfully submitted,

by___/Edward W. Goodman/_____
Edward W. Goodman, Reg. 28,613
Attorney
Tel.: 914-333-9611